



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

C60-OH
Job Sheet 176842



Part No: C60-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 6,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/2/18

Job Tracking No: RA200

Due Date: 5/18/18

Created By: Michelle Gagnon-Donovan

Type: Return

Description: SN: M994-01

Note: DWG C60 Rev. 2 IPP Rev. B 18.04.19 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Start up Operation	1 Ea		5/18/18	0.00	0.00	Start Up Small Fab-4		
110	Small Fab	1 pcs		5/18/18	0.00	1.00	Small Fab-9		AP
120	QC	1 pcs		5/18/18	0.00	0.00	QC5		
130	Customer Acceptance	1 pcs		5/18/18	0.00	0.00	QC6		see attached mts.
140	Outsource	1 pcs		5/18/18			SKY002-VC	5	
150	Packaging	1 pcs		5/18/18	0.00	0.00	Packaging2		
160	QC	1 pcs		5/18/18	0.00	0.00	QC6		
165	Outsource	1 pcs		5/18/18			GRO002-VC	10	mts 18/07/12
166	Rework	1 pcs		5/18/18	0.00	0.00	Packaging2		DAS 38
167	Rework	1 pcs		5/18/18	0.00	0.00	QC6		AP 38
170	Small Fab	1 pcs		5/18/18	0.00	1.00	Small Fab-9		SP
180	QC	1 pcs		5/18/18	0.00	0.00	QC5		SP
190	Packaging	1 pcs		5/18/18	0.00	0.00	Packaging3-2		DAS 21
200	QC21-FG	1 Ea		5/18/18	0.00	0.00	QC21		21 AUG 01 2018

Part Op 110 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

Descriptions: 170 - RE-ASSEMBLE. TEST ASSEMBLY.

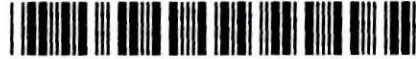
GREASE AEROSHELL NO 7 (M138724) LOCTITE 242 (M138762) SAF-T-EZE (M128063)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C60-AR	Remote Cargo Hook	1 pcs (1 ea)	100-Start up Operation	
188-FPSS-1/4-20-3/8	see P/N 188-FPSS-1/4-20-3/8	2 Ea (2 ea)	170-Small Fab	5048557
188-FSCS-1032-5/8	Screw	4 Ea (4 ea)	170-Small Fab	5046767
2695K2	Heat Shrink	1 ft (1 ea)	170-Small Fab	5048885
32448	16-14 AWG Knife Connector	2 Ea (2 ea)	170-Small Fab	5041618
606.1309	CANAM Plate ID Label	1 pcs (1 ea)	170-Small Fab	5089105
600.1309-A	Label	1 Ea (1 ea)	170-Small Fab	5029592
600.1312	Caution Sticker	1 Ea (1 ea)	170-Small Fab	5072105
AN4-23A	Bolt	2 Ea (2 ea)	170-Small Fab	E123434-40
AN5-21A	Bolt	4 Ea (4 ea)	170-Small Fab	5071344
C10-41	Stain Relief Connector	1 Ea (1 ea)	170-Small Fab	
C2-14-2	Label Rivets	2 Ea (2 ea)	170-Small Fab	5057170
G45-1-1	Manual Knob Release	1 Ea (1 ea)	170-Small Fab	



Container No: S069156



Part: C60

Job No: 176842

Serial No/Batch: M994-01

Revision: 2

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.

1270 Aberdeen Street
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CANADA

TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 07/24/18

176842-1-01 (S)

* C45-10-1	Spring Pin	1 Ea (1 ea)	170-Small Fab	E	
C45-11-2	Locating Pin	2 Ea (2 ea)	170-Small Fab		5054320
C45-12-1	Lock Bushing	2 Ea (2 ea)	170-Small Fab		5040657
C45-12-2	Lock Shaft	1 Ea (1 ea)	170-Small Fab		5091718
C45-12-4	Lock Roller	1 Ea (1 ea)	170-Small Fab		
C45-12-5	Lock Roller Pin	1 Ea (1 ea)	170-Small Fab		
C45-12-6	Retaining Ring	2 Ea (2 ea)	170-Small Fab		5054986
C45-13-1	Keeper Bushing	2 Ea (2 ea)	170-Small Fab		5069580
C45-13-2	Spacer	2 Ea (2 ea)	170-Small Fab		5027246
C45-13-3	Keeper Shaft	1 Ea (1 ea)	170-Small Fab		
C45-13-4	Keeper	1 Ea (1 ea)	170-Small Fab		
C45-13-5	Keeper Spring	1 Ea (1 ea)	170-Small Fab		5053218
C45-3-11	Actuator	1 Ea (1 ea)	170-Small Fab		
C45-3-12	DU Bearing	1 Ea (1 ea)	170-Small Fab		5053842
C45-3-2	Latch Roller Pin	1 pcs (1 ea)	170-Small Fab		5029316
C45-3-2-1	Snap Ring	2 Ea (2 ea)	170-Small Fab		5066686
C45-3-3	Latch Roller	1 Ea (1 ea)	170-Small Fab		
* C45-3-4	Pin	2 Ea (2 ea)	170-Small Fab		5047632
C45-3-4-1	Retaining Ring	4 Ea (4 ea)	170-Small Fab		50868056
C45-3-5	Spacer	2 Ea (2 ea)	170-Small Fab		5027245
C45-3-6	Latch	1 Ea (1 ea)	170-Small Fab		
C45-3-7	Link	1 pcs (1 ea)	170-Small Fab		
C45-3-8A	Actuator Shaft Bushing	1 Ea (1 ea)	170-Small Fab		5076197
C45-3-8B	Actuator Shaft Bushing	1 Ea (1 ea)	170-Small Fab		5078801
C45-3-9	Lever Spring	1 pcs (1 ea)	170-Small Fab		5089520
C45-4-1	Trunnion Bushing	2 Ea (2 ea)	170-Small Fab		5078803
C45-4-4A	C45 Load Beam Assembly	1 Ea (1 ea)	170-Small Fab		5075347
* C45-4-5	Loadbeam Spacer	1 Ea (1 ea)	170-Small Fab		5043615
C45-5-1	Lever Stop Pin	1 Ea (1 ea)	170-Small Fab		5040657
C45-5-2	Lever Stop	1 pcs (1 ea)	170-Small Fab		
C45-7-1	LOADBEAM BUMPER	1 Ea (1 ea)	170-Small Fab		5029332
C45-7-2	Lock Bumper	2 Ea (2 ea)	170-Small Fab		5075337
C45-8-1-2	Solenoid Nut	2 Ea (2 ea)	170-Small Fab		
* C45-8-2	Solenoid	1 Ea (1 ea)	170-Small Fab		5084867
C45-8-4	Solenoid Cover Gasket	1 Ea (1 ea)	170-Small Fab		5029336
C45-8-5	Solenoid Cover	1 Ea (1 ea)	170-Small Fab		
C45-9-1	Clock Spring Cover	1 pcs (1 ea)	170-Small Fab		
C45-9-2	Clock Spring	1 pcs (1 ea)	170-Small Fab		
C60-10-2	Lock Spring	2 Ea (1 ea)	170-Small Fab		5060391
C60-11-1	Side Plate Solenoid	1 Ea (1 ea)	170-Small Fab		
* C60-12-3	Lock	1 Ea (1 ea)	170-Small Fab	E	S
C60-2-1	Side Plate	1 Ea (1 ea)	170-Small Fab		
C60-3-1	Radial Bearing	2 Ea (2 ea)	170-Small Fab		5060135
C60-3-10	Latch Shaft	1 pcs (1 ea)	170-Small Fab		
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	170-Small Fab		
* EL314-SJTOW	3 Wire	1 ft (1 ea)	170-Small Fab		5047767
MS21044N5	Nut	4 Ea (4 ea)	170-Small Fab		5083546
MS27039-4-08	Screw	1 Ea (1 ea)	170-Small Fab		1450575261
NAS1149F0463P	Washer	3 Ea (3 ea)	170-Small Fab		5037330
NAS1149F0563P	Washer	12 Ea (8 ea)	170-Small Fab		5056461
					5067961

Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	C60	1	0	0
	188-FPSS-1/4 20-3/8	2	0	0
170-Small Fab	188-FSCS-1032-5/8	4	369	0
	2595K2	1	26	0
	32448	2	159	0
	600.1309	1	100	0
	600.1309-A	1	0	0
	600.1312	1	22	0
	AN4-23A	2	582	0
	AN5-21A	4	73	0
	C10-41	1	48	0
	C2-14-2	2	196	0
	C45-1-1	1	0	0
	C45-10-1	1	91	0
	C45-11-2	2	78	0
	C45-12-1	2	16	0
	C45-12-2	1	11	0
	C45-12-4	1	0	0
	C45-12-5	1	1	0
	C45-12-6	2	84	0
	C45-13-1	2	13	0
	C45-13-2	2	82	0
	C45-13-3	1	0	0
	C45-13-4	1	0	0
	C45-13-5	1	95	0
	C45-3-11	1	11	0
	C45-3-12	1	12	0
	C45-3-2	1	0	0
	C45-3-2-1	2	54	0
	C45-3-3	1	0	0
	C45-3-4	2	20	0
	C45-3-4-1	4	150	0
	C45-3-5	2	78	0
	C45-3-6	1	1	0
	C45-3-7	1	0	0
	C45-3-8A	1	57	0
	C45-3-8B	1	38	0
	C45-3-9	1	55	0
	C45-4-1	2	48	0
	C45-4-4A	1	4	0
	C45-4-5	1	11	0
	C45-5-1	1	41	0
	C45-5-2	1	0	0
	C45-7-1	1	0	0
	C45-7-2	2	12	0
	C45-8-1-2	2	20	0
	C45-8-2	1	2	0
	C45-8-4	1	0	0
	C45-8-5	1	10	0
	C45-9-1	1	0	0
	C45-9-2	1	0	0
	C60-10-2	1	42	0
	C60-11-1	1	0	0
	C60-12-3	1	0	0
	C60-2-1	1	0	0
	C60-3-1	2	18	0
	C60-3-10	1	0	0
	EL-PLUG-M	1	79	0
	EL314-SJTOW	1	844	0
	MS21044N5	4	139	0
	MS27039-4-08	1	77	0
	NAS1149F0463P	3	697	0
	NAS1149F0563P	8	590	0

Part Specifications

Specifications could not be found.

Plex 7/12/18 9:17 AM Dart.Gagnon.Michelle



Dart Aerospace Ltd.
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Canada

Tel (613) 632-5200

C60-OH
Job Sheet 176842



Part No: C60-OH

Job Qty: 1 ea

Part Name: C-Series Remote Hook 6,000 lbs Lift Capacity



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 5/2/18

Job Tracking No: RA200 SN: M994-01

Due Date: 5/18/18

Created By: Michelle Gagnon-Donovan

Type: Return

Description:

Note: DWG C60 Rev. 2 IPP Rev. B 18.04.19 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
100	Start up Operation	1 Ea	5/18/18	5/18/18	0.00	0.00	Start Up Small Fab-4		
110	Small Fab	1 pcs	5/18/18	5/18/18	0.00	1.00	Small Fab-9		A.P. SB
120	QC	1 pcs	5/18/18	5/18/18	0.00	0.00	QC5		
130	Customer Acceptance	1 pcs	5/18/18	5/18/18	0.00	0.00			
140	Outsource	1 pcs	5/18/18	5/18/18	0.00	0.00			
150	Packaging	1 pcs	5/18/18	5/18/18	0.00	0.00	Packaging2		
160	QC	1 pcs	5/18/18	5/18/18	0.00	0.00	QC6		
170	Small Fab	1 pcs	5/18/18	5/18/18	0.00	1.00	Small Fab-9		
180	QC	1 pcs	5/18/18	5/18/18	0.00	0.00	QC5		
190	Packaging	1 pcs	5/18/18	5/18/18	0.00	0.00	Packaging3-2		
200	QC21-FG	1 Ea	5/18/18	5/18/18	0.00	0.00	QC21		

Part Op 110 - TEST ASSEMBLY. DISASSEMBLE ASSEMBLY. INSPECT DAMAGE PART.

Descriptions: 170 - RE-ASSEMBLE. TEST ASSEMBLY.

Outsource 145: Groupe Altech: PO040308 - CT 18-6-22 Cmt 18/07/18

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
C60-AR	Remote Cargo Hook	1 pcs (1 ea)	100-Start up Operation	
188-FPSS-1/4 20-3/8	Set Screw	2 Ea (2 ea)	170-Small Fab	
188-FSCS-1032-5/8	Screw	4 Ea (4 ea)	170-Small Fab	
2595K2	Heat Shrink	1 ft (1 ea)	170-Small Fab	
32448	16-14 AWG Knife Connector	2 Ea (2 ea)	170-Small Fab	
600.1309	CANAM Plate ID Label	1 pcs (1 ea)	170-Small Fab	
600.1309-A	Label	1 Ea (1 ea)	170-Small Fab	
600.1312	Caution Sticker	1 pcs (1 ea)	170-Small Fab	
AN4-23A	Bolt	2 Ea (2 ea)	170-Small Fab	
AN5-21A	Bolt	4 Ea (4 ea)	170-Small Fab	
C10-41	Stain Relief Connector	1 Ea (1 ea)	170-Small Fab	
C2-14-2	Label Rivets	2 Ea (2 ea)	170-Small Fab	
C45-1-1	Manual Knob Release	1 Ea (1 ea)	170-Small Fab	
C45-10-1	Spring Pin	1 Ea (1 ea)	170-Small Fab	
C45-11-2	Locating Pin	2 Ea (2 ea)	170-Small Fab	
C45-12-1	Lock Bushing	2 Ea (2 ea)	170-Small Fab	
C45-12-2	Lock Shaft	1 Ea (1 ea)	170-Small Fab	

Plex 5/2/18 8:37 AM Dart.Gagnon.Michelle



Container No: S069156



Part: C60

Job No: 176842

Serial No/Batch: S069156

Revision: 2

Inspector:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 05/07/18

C45-12-4	Lock Roller	1 Ea (1 ea)	170-Small Fab
C45-12-5	Lock Roller Pin	1 Ea (1 ea)	170-Small Fab
C45-12-6	Retaining Ring	2 Ea (2 ea)	170-Small Fab
C45-13-1	Keeper Bushing	2 Ea (2 ea)	170-Small Fab
C45-13-2	Spacer	2 Ea (2 ea)	170-Small Fab
C45-13-3	Keeper Shaft	1 Ea (1 ea)	170-Small Fab
C45-13-4	Keeper	1 Ea (1 ea)	170-Small Fab
C45-13-5	Keeper Spring	1 Ea (1 ea)	170-Small Fab
C45-3-11	Actuator	1 Ea (1 ea)	170-Small Fab
C45-3-12	DU Bearing	1 Ea (1 ea)	170-Small Fab
C45-3-2	Latch Roller Pin	1 pcs (1 ea)	170-Small Fab
C45-3-2-1	Snap Ring	2 Ea (2 ea)	170-Small Fab
C45-3-3	Latch Roller	1 Ea (1 ea)	170-Small Fab
C45-3-4	Pin	2 Ea (2 ea)	170-Small Fab
C45-3-4-1	Retaining Ring	4 Ea (4 ea)	170-Small Fab
C45-3-5	Spacer	2 Ea (2 ea)	170-Small Fab
C45-3-6	Latch	1 Ea (1 ea)	170-Small Fab
C45-3-7	Link	1 pcs (1 ea)	170-Small Fab
C45-3-8A	Actuator Shaft Bushing	1 Ea (1 ea)	170-Small Fab
C45-3-8B	Actuator Shaft Bushing	1 Ea (1 ea)	170-Small Fab
C45-3-9	Lever Spring	1 pcs (1 ea)	170-Small Fab
C45-4-1	Trunnion Bushing	2 Ea (2 ea)	170-Small Fab
C45-4-4A	C45 Load Beam Assembly	1 Ea (1 ea)	170-Small Fab
C45-4-5	Loadbeam Spacer	1 Ea (1 ea)	170-Small Fab
C45-5-1	Lever Stop Pin	1 Ea (1 ea)	170-Small Fab
C45-5-2	Lever Stop	1 pcs (1 ea)	170-Small Fab
C45-7-1	LOADBEAM BUMPER	1 Ea (1 ea)	170-Small Fab
C45-7-2	Lock Bumper	2 Ea (2 ea)	170-Small Fab
C45-8-1-2	Solenoid Nut	2 Ea (2 ea)	170-Small Fab
C45-8-2	Solenoid	1 Ea (1 ea)	170-Small Fab
C45-8-4	Solenoid Cover Gasket	1 Ea (1 ea)	170-Small Fab
C45-8-5	Solenoid Cover	1 Ea (1 ea)	170-Small Fab
C45-9-1	Clock Spring Cover	1 pcs (1 ea)	170-Small Fab
C45-9-2	Clock Spring	1 pcs (1 ea)	170-Small Fab
C60-10-2	Lock Spring	1 Ea (1 ea)	170-Small Fab
C60-11-1	Side Plate Solenoid	1 Ea (1 ea)	170-Small Fab
C60-12-3	Lock	1 Ea (1 ea)	170-Small Fab
C60-2-1	Side Plate	1 Ea (1 ea)	170-Small Fab
C60-3-1	Radial Bearing	2 Ea (2 ea)	170-Small Fab
C60-3-10	Latch Shaft	1 pcs (1 ea)	170-Small Fab
EL-PLUG-M	3-Prong Male Spade Plug	1 Ea (1 ea)	170-Small Fab
EL314-SJTOW	3 Wire	1 ft (1 ea)	170-Small Fab
MS21044N5	Nut	4 Ea (4 ea)	170-Small Fab
MS27039-4-08	Screw	1 Ea (1 ea)	170-Small Fab
NAS1149F0563P	Washer	8 Ea (8 ea)	170-Small Fab
NAS1149F0632P	Washer	3 Ea (3 ea)	170-Small Fab

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Start up Operation	C60	1	0	0
170-Small Fab	188-FPSS-1/4 20-3/8	2	46	0
	188-FSCS-1032-5/8	4	257	0
	2595K2	1	30	0
	32448	2	173	0
	600.1309	1	0	0
	600.1309-A	1	0	0
	600.1312	1	0	0
	AN4-23A	2	600	0
	AN5-21A	4	53	0
	C10-41	1	21	0
	C2-14-2	2	264	0
	C45-1-1	1	0	0
	C45-10-1	1	94	0
	C45-11-2	2	42	0
	C45-12-1	2	22	0
	C45-12-2	1	14	0
	C45-12-4	1	0	0
	C45-12-5	1	0	0
	C45-12-6	2	48	0
	C45-13-1	2	0	0
	C45-13-2	2	86	0
	C45-13-3	1	0	0
	C45-13-4	1	0	0
	C45-13-5	1	95	0
	C45-3-11	1	13	0
	C45-3-12	1	17	0
	C45-3-2	1	0	0
	C45-3-2-1	2	58	0
	C45-3-3	1	0	0
	C45-3-4	2	24	0
	C45-3-4-1	4	64	0
	C45-3-5	2	80	0
	C45-3-6	1	3	0
	C45-3-7	1	0	0
	C45-3-8A	1	0	0
	C45-3-8B	1	0	0
	C45-3-9	1	0	0
	C45-4-1	2	2	0
	C45-4-4A	1	0	0
	C45-4-5	1	14	0
	C45-5-1	1	16	0
	C45-5-2	1	0	0
	C45-7-1	1	0	0
	C45-7-2	2	2	0
	C45-8-1-2	2	0	0
	C45-8-2	1	0	0
	C45-8-4	1	1	0
	C45-8-5	1	14	0
	C45-9-1	1	0	0
	C45-9-2	1	0	0
	C60-10-2	1	32	0
	C60-11-1	1	0	0
	C60-12-3	1	0	0
	C60-2-1	1	0	0
	C60-3-1	2	8	0
	C60-3-10	1	0	0
	EL-PLUG-M	1	57	0
	EL314-SJTOW	1	1,013	0
	MS21044N5	4	99	0
	MS27039-4-08	1	86	0
	NAS1149F0563P	8	161	0
	NAS1149F0632P	3	643	0

5/2/2018

[Dart Hawkesbury] Job Sheet - Gagnon-Donovan, Michelle

Part Specifications
Specifications could not be found.

Plex 5/2/18 8:37 AM Dart.Gagnon.Michelle

Inspection Sheet Complete RA200

Customer QA Ref #

0

Part Number	Batch / Serial #	Quantity	Part Complete	Rev/CHG Current	New Paperwork	New Labels	Disposition	Work order #	Work order instructions
C60	M994-01	1	☐ Yes	☐ Yes	☐ Yes	☐ Yes	CUSTOMER SUPPLIED	S044777	Overhaul
0		#VALUE!	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		#VALUE!	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		#VALUE!	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		#VALUE!	☐ Yes	☐ Yes	☐ Yes	☐ Yes			
0		#VALUE!	☐ Yes	☐ Yes	☐ Yes	☐ Yes			

DA
38
9-88

QC Approval: _____ 0

Date: 0-Jan-00 _____



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040308**

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO040308
PO Date: 6/22/18
Due Date: 7/4/18
Purchase Order
Revision:
Revision Date:
Ship-To Contact: Tsimiklis, ChrisoulaPhone:

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	176842	C60-OH	C-Series Remote Hook 6,000 lbs Lift Capacity -Issue P/O to Groupe Altech: P/O _____ - Strip -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed	7/4/18	1 pcs	0 pcs	1 pcs	\$150.00/pcs	\$150.00
2	176991	C10-OH	C-Series Remote Hook 10,000 lbs Lift Capacity -Issue P/O to Groupe Altech: P/O _____ - Strip -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Certificate of Conformity is required	Firmed	7/4/18	1 pcs	0 pcs	1 pcs	\$75.00/pcs	\$75.00
	176989			Firmed	7/4/18	1 pcs	0 pcs	1 pcs	\$75.00/pcs	\$75.00
Sub Total:						2	0	2		\$150.00

Items											
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price	
3	177399	C45-K-OH	C-Series Remote Hook 4,500 lbs Lift Capacity - Keeperless -Issue P/O to Groupe Altech: P/O _____ - Strip -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required	Firmed	7/4/18	1 pcs	0 pcs	1 pcs	\$150.00/pcs	\$150.00	
4	179782	PC250-700	-Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade C -Nickel Plate .0004-.0006 - Certificate of Conformity is required	Firmed	7/4/18	1 pcs ✓	0 pcs 1x	1 pcs	\$225.00/pcs	\$225.00 A18607/10	
5	R179783	C10-10-1	Actuator Shaft -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004-.0006 -Bake after plating -Certificate of Conformity is required	Firmed	7/4/18	4 pcs	0 pcs	4 pcs	\$37.50/pcs	\$150.00	
6	179831	RBW6305G02831-3G	Tool, Main Gear Box Upper Fitting Replacement -Issue P/O to GROUPE ALTECH: P/O _____ Zinc plate, ASTM B633 TYPE 2 SC2 -Color yellow -Material type; 1018 -Certificate of Conformity is required	Firmed	7/4/18	2 pcs	0 pcs	2 pcs	\$45.00/pcs	\$90.00 2x Cind 1807.03	

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
7	R179819	PC250-600	Bell Crank -Issue P/O to GROUPE ALTECH: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -Nickel Plate .0004- .0006 -Bake after plating -Material type; -Certificate of Conformity is required	Firmed	7/4/18	1 pcs	0 pcs 1x	1 pcs	\$150.00/pcs At 18671/10	\$150.00
8	178860	RBW6420G00131-8G-1	Base Welded Assy -Issue P/O to GROUPE ALTECH: P/O _____ -Zinc plate, ASTM B633 TYPE 2 SC2 -Color BLACK -Material type; 4140 -Certificate of Conformity is required	Firmed	7/4/18	6 pcs	0 pcs 6x	6 pcs	\$37.50/pcs 4m2 18.0703	\$225.00
Grand Total:										\$1,290.00
Order Notes										
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.										

Plex 6/29/18 12:34 PM dart.tsimiklis.chrisoula



Certificat de Conformité / Certificate of Compliance

(010559-3)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

010559 - 3

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
09-Jul-2018		Aman		040308				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	C60-OH Rev.	C60-OH 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F 0.0004 TO 0.0006 THICK BAKE AFTER PLATING	E-NICKEL-200 CH	1	1	0	0	0
2	C-10-OH Rev.	C-SERIES REMOTE HOOK (SET OF 5) 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500] QQ-N-290 CLASS 2 GRADE E OR F 0.0004 TO 0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	2	2	0	0	0
3	C45-K-OH Rev.	C45-K-OH 01 -E-NIC STEEL 200 [E-NICKEL STEEL 200] QQ-N-290 CLASS 2 GRADE E OR F 0.0004 TO 0.0006 THICK BAKE AFTER PLATING	E-NICKEL STEEL CH	1	1	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.



SUBJECT
OWNERS & OVERHAUL PROCEDURE MANUAL 6,000 LBS REMOTE CARGO HOOK C60

REPORT
O&OPM-C60
REV. 3
3/1/2017

...continued from previous page

✓ C45-3-12	S053342 S053342	DU Bearing	1
✓ C45-4-1	S075317	Trunnion Bushing	2
✓ C45-5-1	E	Lever Stop Pin	1
✓ C45-7-1	E	Load Beam Bumper	1
+ C45-7-2	mangue 9x	Lock Bumper	2
✓ C45-8-4	ip S029336	Solenoid Cover Gasket	1
+ 188-FSCS-1032-5/8		Screw	4
✓ C45-11-2	S040655	Locating Pin	2
✓ C45-12-1	S091718 mangue	Lock Bushing	2
✓ C45-12-6	S054986 mangue	Retaining Ring	2
✓ C45-13-1	S061520 mangue	Keeper Bushing	2
✓ C45-13-2	S027246	Spacer	2
✓ C45-13-5	S053218	Keeper Spring	1
✓ C60-3-1	S060135	Radial Bearing	2
✓ C60-10-2	S060311	Lock Spring	1
✓ C2-14-2	S057170	Label Rivets (not shown)	2
✓ 600.1309-A	S029592	Label (not shown)	1
✓ 600.1312	S072105	Caution Sticker (not shown)	1
✓ AN4-23A	F123431-40	Bolt	2
✓ AN5-21A	S071344	Bolt	4
✓ AN960-416	✓	Washer	3
✓ AN960-516	✓	Washer	8
✓ MS21044N5	S057526-1	Lock Nut	4
✓ MS27039-4-08	S0391330	Bolt	1

Table 6.2 – Dart Aerospace C60 Overhaul Kit Parts List

PROPRIETARY

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**SUBJECT**

OWNERS & OVERHAUL PROCEDURE MANUAL 6,000 LBS REMOTE CARGO HOOK C60

REPORT

O&OPM-C60

REV. 3

3/1/2017

Section 6.0: Overhaul Preparation

Before the overhaul process may begin, the following preparations must be made.

6.1 REQUIRED ITEMS

The following items are required to complete the overhauling process as outlined in this manual:

- Dart Aerospace C60 Overhaul Kit (P/N: 648.4705)
- Loctite #620 Retaining Compound
- Aeroshell Grease 7
- SAF-T-EZE Copper Anti-Seize (or equivalent)
- Vinyl Electrical Tape
- Standard Multimeter
- Parts Washing Solvent
- Aluminum Oxide 100/200/400, or Scotch Brite (or similar)
- Raychem RNF-100 Heat-Shrink Tubing .25"exp - .125"rec (or equivalent)

6.2 PARTS LIST AND ASSEMBLY FIGURES

A copy of the complete parts list and assembly figures are included in this document and may be used as a reference source at any time.

Table 6.2 below lists all the parts contained in the Dart Aerospace C60 Overhaul Kit (P/N: 648.4705). It is recommended that this table be used to verify that all parts are present.

PART#	NAME	QTY. (648.4705)
✓ 188-FPSS-1/4 20-3/8	Set Screw	2
✓ C45-3-2-1 <i>Sold</i>	Snap Ring	2
✓ C45-3-4-1 <i>S68056</i>	Retaining Ring	4
✓ C45-3-5 <i>S027245</i>	Spacer	2
✓ C45-3-8A <i>S076197</i>	Actuator Shaft Bushing	1
✓ C45-3-8B <i>S078801</i>	Actuator Shaft Bushing Solenoid Side	1
★ C45-3-9 <i>E</i>	Lever Spring	1

...continued on next page

PROPRIETARY

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Remote Cargo Hook Test Form

C60

Work Order 176842

Customer _____

Serial Number M994-01

Date 6 June 2018

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	15,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	PASS.
10	3,000	Electircal, 25 volts	No "hang ups" permitted	N/A	FAIL
2	6,000	Electircal, 22 volts	Current shall not exceed 12.4A	0.2 Amp.	FAIL
2	4,500	Electircal, 22 volts	Current shall not exceed 12.4A	0.2 Amp.	FAIL
2	3,000	Electircal, 22 volts	Current shall not exceed 12.4A	0.2 Amp.	FAIL
2	1,500	Electircal, 22 volts	Current shall not exceed 12.4A	0.2 Amp.	FAIL
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	0.2 Amp.	FAIL
1	6,000	Electircal, 20 volts	Current shall not exceed 11.3A	0.1 Amp.	FAIL
1	6,000	Electircal, 28 volts	Current shall not exceed 15.8A	0.2 Amp.	FAIL
1	6,000	Manual		N/A	PASS
1	6,000	Impact Test	Impact shackle 10 times, shall not release	N/A	PASS.
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	0L Ohms	FAIL
1	N/A	Electircal Continuity	Across both wires	N/A	FAIL

Test Conducted By Luc Larivière

Signature: _____

Submit



Remote Cargo Hook Test Form

C60

Work Order 176842

Customer _____

Serial Number M994-01

Date 6 June 2018

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	15,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	
10	3,000	Electircal, 25 volts	No "hang ups" permitted	N/A	
2	6,000	Electircal, 22 volts	Current shall not exceed 12.4A	Amp.	
2	4,500	Electircal, 22 volts	Current shall not exceed 12.4A	Amp.	
2	3,000	Electircal, 22 volts	Current shall not exceed 12.4A	Amp.	
2	1,500	Electircal, 22 volts	Current shall not exceed 12.4A	Amp.	
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	Amp.	
1	6,000	Electircal, 20 volts	Current shall not exceed 11.3A	Amp.	
1	6,000	Electircal, 28 volts	Current shall not exceed 15.8A	Amp.	
1	6,000	Manual		N/A	
1	6,000	Impact Test	Impact shackle 10 times, shall not release	N/A	
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	Ohms	
1	N/A	Electircal Continuity	Across both wires	N/A	

Test Conducted By _____

Signature: _____

QC 5 Small FAB / QA

Submit



Overhaul Incoming Inspection
C45 Cargo Hook

Custome 176842

Date 2018/06/25

Part Numbe _____

Serial Number M994-01

RA 200

Additional Recomendend Replacement Parts

Part Number to Replace

Customer Approval

Qty (2) C45-3-4 Pin

☐

Qty (1) C45-4-2 ~~BEAM SHAFT (PIN)~~

☐

LOAD BEAM TRUNION

☐☐☐☐☐☐☐☐

Inspected By ALAIN PATRY

Jennifer Renwick

From: Ernest Guo
Sent: Monday, July 02, 2018 3:00 AM
To: Jennifer Renwick
Subject: RE: RA200 - Order 2862 C45 Overhaul

Hi Jennifer,

Just want to double check has this one been started on the repair? The customer is our distributor in Japan, I will get the revised PO again, please ask production to proceed.

This has been in our facility since Jan.

Best Regards,

ERNEST GUO

Inside Sales Representative - Asia Pacific

DART AEROSPACE

M +61 413763795

+1 800 556- 4166

www.dartaerospace.com



From: Chantal Chartrand
Sent: Friday, 29 June 2018 11:50 PM
To: Ernest Guo <eguo@dartaero.com>
Cc: Jennifer Renwick <jrenwick@dartaero.com>
Subject: FW: RA200 - Order 2862 C45 Overhaul

Hi Ernest,

I haven't revised this yet.

Please confirm that I am good to go ahead and also you need to advise me if a discount is applicable because I have no idea if there should be or not.

Thanks

cc

From: Jennifer Renwick

Sent: June 27, 2018 8:59 AM

To: Ernest Guo <eguo@dartaero.com>; Ross Black <rblack@dartaero.com>

Cc: Support Eugene <support.or@dartaero.com>; Chantal Chartrand <cchartrand@dartaero.com>

Subject: RE: RA200 - Order 2862 C45 Overhaul

Hi Ernest,

The parts added to this PO have to be chargeable, the customer will have to amend showing pricing with discount (if applicable).

You will have to advise the customer of pricing for each and applicable discounts available. Sorry but this can only be provided by sales, if you have any question you should go to Scott.

Hi Ross,

Can you please confirm pricing of:

C45-3-4 Pin

C45-4-2 Load Beam

Thank you,

Jen

From: Ernest Guo

Sent: Wednesday, June 27, 2018 3:49 AM

To: Jennifer Renwick <jrenwick@dartaero.com>; Chantal Chartrand <cchartrand@dartaero.com>

Cc: Support Eugene <support.or@dartaero.com>

Subject: RE: RA200 - Order 2862 C45 Overhaul

Oh my bad, forgot to mention, distributor discount again if applicable.

Best Regards,

ERNEST GUO

Inside Sales Representative - Asia Pacific

DART AEROSPACE

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+1 800 556- 4166

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From: Ernest Guo

Sent: Wednesday, 27 June 2018 5:48 PM

To: Jennifer Renwick <jrenwick@dartaero.com>; Chantal Chartrand <cchartrand@dartaero.com>

Cc: Support Eugene <support.or@dartaero.com>

Subject: RE: RA200 - Order 2862 C45 Overhaul

Hi Jennifer,

Please see attached revised PO from the customer, please proceed with the repair asap, this one was sent to us back in Jan.

Hi Chantal,

Could you please update the subject order based on new PO?

Thanks very much,

Best Regards,

ERNEST GUO

Inside Sales Representative - Asia Pacific

DART AEROSPACE

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From: Jennifer Renwick

Sent: Tuesday, 26 June 2018 11:08 PM

To: Ernest Guo <eguo@dartaero.com>

Cc: Scott Simpson <ssimpson@dartaero.com>; Caitlin Crooks <ccrooks@dartaero.com>; Support Eugene <support.or@dartaero.com>

Subject: RA200 - Order 2862 C45 Overhaul

Good day Ernest,

Please see the attached overhaul inspection sheet with additional parts found during inspection that need to be replaced. These parts are not included in the overhaul kit, so they will need to be added to the customer PO as chargeable parts.

Once you receive the updated PO from the customer, please forward to Chantal Chartrand as she will update the open order. Please also copy customer support and I can update production that the revised PO has been received and they may continue with changing out those part.

Please let me know if you have any questions.

Thank you,
Jen

From: print.hby@dartaero.com <print.hby@dartaero.com>

Sent: Tuesday, June 26, 2018 10:14 AM

To: Jennifer Renwick <jrenwick@dartaero.com>

Subject: Message from DartAerospace QualityAssurance C224e



Remote Cargo Hook Test Form

C60

Work Order _____

Customer _____

Serial Number 1994-01

Date 2018/07/30

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	15,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	PASS
10	3,000	Electrical, 25 volts	No "hang ups" permitted	N/A	PASS
2	6,000	Electrical, 22 volts	Current shall not exceed 12.4A	Amp.	
2	4,500	Electrical, 22 volts	Current shall not exceed 12.4A	Amp.	
2	3,000	Electrical, 22 volts	Current shall not exceed 12.4A	Amp.	
2	1,500	Electrical, 22 volts	Current shall not exceed 12.4A	Amp.	
2	500	Electrical, 22 volts	Current shall not exceed 12.4A	Amp.	
1	6,000	Electrical, 20 volts	Current shall not exceed 11.3A	Amp.	
1	6,000	Electrical, 28 volts	Current shall not exceed 15.8A	Amp.	
1	6,000	Manual		N/A	
1	6,000	Impact Test	Impact shackle 10 times, shall not release	N/A	
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	Ohms	
1	N/A	Electrical Continuity	Across both wires	N/A	

Test Conducted By ALAIN PATRY

Signature: _____

QC 5 Small FAB / QA

Submit



Remote Cargo Hook Test Form

C60

Work Order

176842

Customer

RA 200

Serial Number

M994-0

Date

2018/07/31

# of Releases	Load (Lbs.)	Release Method	Remarks	Result	Pass/fail
1	15,000	Static Hold	Hold for two Minutes and reduce load to zero	N/A	PASS
10	3,000	Electircal, 25 volts	No "hang ups" permitted	N/A	PASS
2	6,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	4,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	3,000	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	1,500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
2	500	Electircal, 22 volts	Current shall not exceed 12.4A	9.0 Amp.	PASS
1	6,000	Electircal, 20 volts	Current shall not exceed 11.3A	8.0 Amp.	PASS
1	6,000	Electircal, 28 volts	Current shall not exceed 15.8A	11.0 Amp.	PASS
1	6,000	Manual		N/A	PASS
1	6,000	Impact Test	Impact shackle 10 times, shall not release	N/A	PASS
1	N/A	Solenoid Ohms	Shall not exceed 1.7-2.0 Ohms	1.8 Ohms	PASS
1	N/A	Electircal Continuity	Across both wires	N/A	PASS

Test Conducted By

ALAIN PATRY

Signature:

Sylvie Pouchet
QC 5 Small FAB / QA**Submit**